

Agricultural Air Quality Update: USDA-NRCS

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Dr. Bill Puckett

Deputy Chief, Science and Technology

USDA-NRCS

Washington, DC

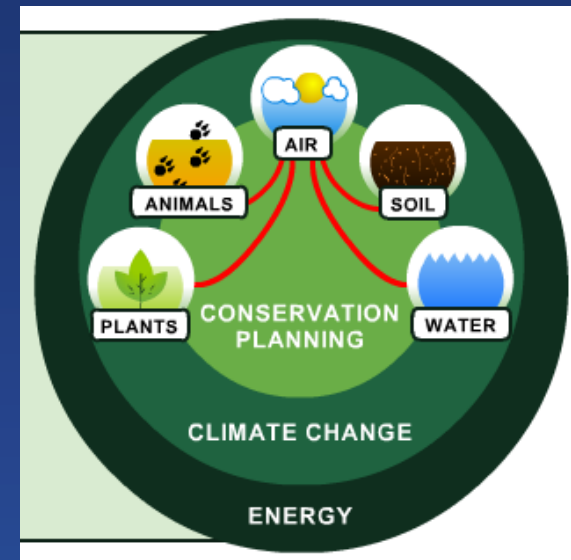
Air Quality:

Clean Air is an NRCS Mission Goal



Air Quality Goals

- Help private land owners and managers meet air quality objectives
- Address air quality in a holistic manner, along with soil, water, plant, animal, human and energy considerations



We Do This By...

- **Working with private landowners in developing conservation systems that best address these issues**
- **Ensuring the best science is used to support conservation decisions**
- **Training NRCS personnel about AQ issues and solutions**
- **Developing and utilizing science and tools that assist NRCS in meeting these challenges**
- **Incentivizing conservation activities that prioritize the air resource, as appropriate**

NRCS Implements Conservation by “Resource Concerns”



- Those for Air Quality and Atmospheric Change:
- Particulate Matter
- Ozone Precursors
- Odors
- Greenhouse Gases

Next, we examine some AQAC “Hot Topics” with regard to these resource concerns

“Hot Topics”

- **Greenhouse Gas Emissions and Carbon Sequestration**
- **Prescribed burning and smoke management**
- **Nuisance Odors**
- **Revision of PM_{2.5} rule and implication for agriculture and natural resources**
- **Revisions to ozone standard (0.075 ppm, 8 hour) and implications for agriculture and natural resources**



- **CarbOn Management Evaluation Tool-- Voluntary Reporting of GHGs**
- www.cometvr.colostate.edu
- On-line decision support tool for estimating soil carbon sequestration, and soon for N₂O
- NRCS is addressing needs for estimates in greater variety of agricultural settings
 - Version 1.1 with expanded rotation choices now operational-- thousands of additional scenarios: for crop and rangeland
 - Version 1.2 (agroforestry) coming in 2009; as well as additional choices for orchards, vineyards, irrigated specialty crops, etc.
 - Version 1.3 (incl. N₂O) coming in 2009

Training

- Four online training courses nearing completion:
 - Air Quality, Climate Change and Energy
 - Why Should We Care About Air Quality?
 - Air Quality Resource Concerns
 - Greenhouse Gases and Carbon Sequestration



Conservation Planning Assistance for Air Quality

- AQAC Practice Standards Workgroup
 - 5 New AQ Standards in Development / Review
 - Combustion Equipment
 - Airflow Filtration and Scrubbing
 - Precision Pest Control Application
 - Dust Control on Unpaved Roads and Surfaces
 - Corral and pen dust management
- Training State AQ Contacts for in-state expertise and assistance



Environmental Quality Incentives Program (EQIP)

- A voluntary conservation program for farmers and ranchers that promotes agricultural production and environmental quality
- Funds Spent on Air Quality
 - 2008 - \$62 million
 - 2007 - \$28 million
 - 2006 - \$22 million



Conservation Security Program (CSP)

- Voluntary program to support ongoing stewardship of private agricultural lands
- Provide payments for maintaining and enhancing natural resources
- \$15 million on AQ enhancements from 2006-2008
- 31 States with an AQ emphasis



Conservation Technical Assistance (CTA) Program

- Foundation for all NRCS science and technology
- Funds technology transfer
 - Interim and final practice standards
 - Measurement tools
 - Models



Conservation Innovation Grants (CIG)

- To stimulate the development and adoption of innovative conservation approaches and technologies—under EQIP
- National and State grants; up to 50% cost share
- \$101.5 million since 2004!
- \$14 million in 45 grants, 40 states in FY08
- Approx. \$2.5 million in air-related grants in FY08





Potential Future NRCS Air Quality Conservation Activities

- **Conservation Innovation Grants and Air Quality**
- **EQIP**
- **Environmental Services Markets (e.g., Carbon)**
- **Animal Feeding Operations and Climate Change**

Questions ???

All photos from NRCS archives except where noted

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